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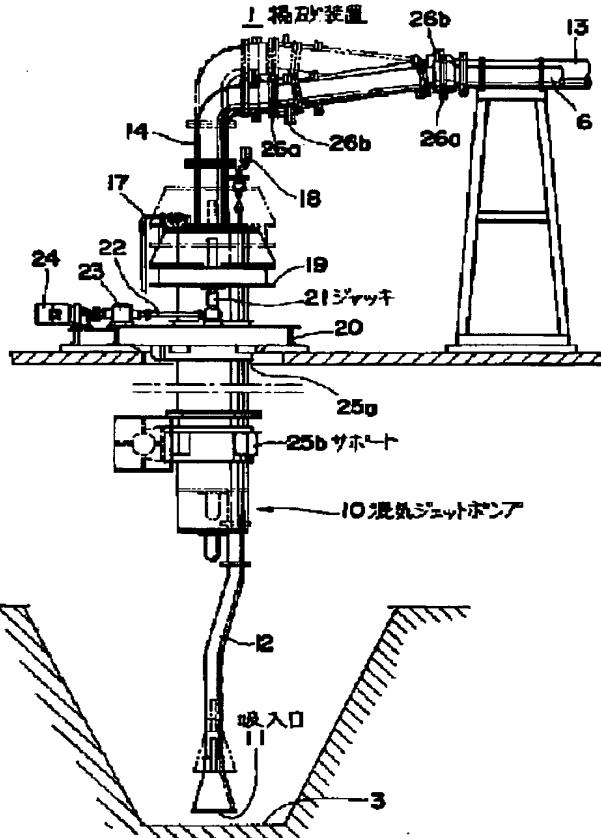
APPLICATION DATE : 04-12-95
 APPLICATION NUMBER : 07315164

APPLICANT : MAEZAWA IND INC;

INVENTOR : ODAKA SHIRO;

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TITLE : SAND LIFTING APPARATUS



ABSTRACT : PROBLEM TO BE SOLVED: To maintain a sand lifting function even when excessive sand is accumulated near the suction port of a mixed gas jet pump by forming the suction port of the pump vertically movably.

SOLUTION: A mixed gas jet pump 10 is installed vertically movably, and a suction port 11 is formed vertically movably. When a large amount of sand is accumulated in the suction port 11 part in the lower part to make sand lifting impossible, an electric motor 24 is rotated in both ways to move the pump 10 vertically to move the suction port vertically in sand. In this way, fluidity is given to the sand near the suction port 11 to enable sand lifting. In this process, since the pressure in a suction pipe 12 is reduced when the sand cannot be lifted, when an electric circuit is formed so that the motor 24 is operated automatically on the basis of pressure lowering detected by a vacuum meter 18, the motor is actuated automatically when sand lifting is impossible, enabling sand lifting.

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